SPRING-1908



GUBRANS SANS

10 & 12 MARKET ST, MANCHESTER FARM SEED WAREHOUSE-185. WATER STREET.

GLIBRANS'

Are honoured with the . . Patronage of



His Most Gracious Majesty King Edward VII.

Her Royal Highness the Duchess of Albany.

Her Royal Highness Princess Henry of Battenberg.

Her Serene Highness Princess Victor Hohenlohe.

And the leading Nobility and Gentry of the Country.

Clibrans' Farm Seeds were awarded the only Silver Medals at Altrincham Shows, 1903 & 1905, and at Worsley, 1904

BUSINESS NOTICES.

EARLY ORDERS.—We shall feel obliged by our customers sending in their orders as soon as possible after receiving our Catalogue.

CATALOGUES.—We often have complaints of the non-receipt of Catalogues, and we shall esteem it a favour if customers will inform us when they do not receive them at the usual periods, so that another copy may be sent. When customers change their residence we shall be pleased if they will furnish us with their new address.

CARRIAGE OF SEEDS.—All orders amounting to 20/- and upwards, with the exception of Vetches, are delivered free to any Station in England and Wales.

TERMS OF PAYMENT.—Accounts due Quarterly and Half-yearly strictly net; 5 per cent discount allowed off Seeds for cash with order or within 14 days from date of invoice.

REMITTANCES.—Cheques, Postal and Money Orders to be made payable at Altrincham.

RETURNED PACKAGES.—Sacks and Bags, &c., which have been forwarded with Seeds, will be allowed full price for when returned carriage paid. They should be addressed to 185, Water St, Manchester, name and address of sender must be on the address label, and a Post Card should always be sent advising us of their despatch.

SPECIAL QUOTATIONS.—We shall be pleased to furnish special prices and forward samples, with analysis of germination and purity if desired, to anyone requiring large quantities of Farm Seeds.

PURITY AND GROWTH OF SEEDS.—We exercise the greatest care in selecting our Seeds from Stocks of known purity and the highest merit. All are thoroughly cleaned by improved machinery, and the growth of each sample is carefully tested. Our customers may, therefore, order with the greatest confidence.

EXPORT ORDERS.—Seeds, Bulbs, Plants, &c., specially selected for exportation to all parts, and are carefully and securely packed so as to reach their destination in the best possible condition.

NON-WARRANTY.—CLIBRANS send out only Seeds that will, to the best of their bellef, give entire satisfaction; it must, however, be expressly understood that they warrant neither description, growth, nor productiveness of any Seeds they sell, nor will they hold themselves in any way responsible for the crop. CLIBRANS will take it for granted that all who order from them do so with a full knowledge of the preceding.







BRIEF NOTES

ON THE

Seed Harvest of 1907



Manchester, February, 1908.

We have again the pleasure of submitting our Annual Catalogue of Agricultural Seeds, with a few brief notes appended as to the crops harvested last year, which we trust will be of interest.

While thanking our former clients for their past favours we have every confidence in soliciting their further orders, and trust to their kind recommendations to such of their friends as may require Agricultural Seeds.

- **ALSIKE CLOVER.** The crops generally have been below the average and really fine samples are scarce.
- WHITE CLOVER. The crops both in England and the Continent are below the average, and although we have seen brighter-coloured samples, fine useful seed is plentiful.
- **TREFOIL.** Crops of both English and Continental growths are under the average.
- **TURNIPS, SWEDES AND MANGELS.** Crops generally are very short, and some varieties are scarce.

- RYE-GRASS PERENNIAL. The crop turned out much shorter than was anticipated, and natural weights per bushel also lighter, consequently prices are considerably higher than last year.
- **RYE-GRASS ITALIAN.** There was a fair average crop in Ireland and France, but the English crop was only a moderate one.
- NATURAL GRASSES. Cocksfoot was a very short crop in New Zealand from whence the bulk of our markets are supplied. Timothy was under the average, as also was Meadow Fescue, while Meadow Foxtail was again a very poor crop. Crested Dogstail and Hard Fescue were fair average crops.
- **RED CLOVER.** England produced a miserable crop, which was harvested in very bad condition. In Canada, America, France and Germany, the crops were decidedly short and these countries are all importing largely from England.

OUR STAND AT ALTRINCHAM SHOW.

(From the Altrincham Guardian, Sept. 28th, 1907).

Messrs, Clibrans, Altrincham and Manchester. Fine as have been the displays made by this firm at previous shows, we cannot recall ever having seen their immense exhibit so comprehensive and so well displayed as on this occasion. Whether one was interested in Agriculture, Horticulture, Fruit Culture, or simply an admirer of the beautiful as represented in flowers, abundance of material to occupy attention and elicit admiration was to be found on Messrs. Clibrans' stand. Very striking was a large exhibit of Vegetables representative of the finest varieties of cabbage, cauliflower, carrot, parsnip, leek, and celery, all grown at the seed trial grounds of the firm at Bramhall; in this section was a very fine variety of kidney bean—the finest we have seen—that Messrs. Clibrans are to introduce next season. Apples representing varieties best suited for enlitivation in Cheshire, were also displayed. Amongst these were to be seen Rioston, Cox's Orange, Ecklinville Seedling, Lord Suffield, Rival, and other sterling varieties. Great interest was displayed by visitors in the very extensive collection of dried grasses adapted for special purposes. Correctly labelled and neatly arranged, they constituted an instructive and valuable feature. The best varieties of Swedes—green and purple top—Mangels, and other roots, were represented by heavy solid specimens. Not only to improvement in size, but in quality, great pains and labour have been expended by Messrs. Clibrans for years past, and the satisfactory results repay the time spent upon the work. Decorative plants on pots, grown in the firm's glasshouses at Hale, were present in full force—brilliant red and yellow Celosias, pink and crimson Cocks-combs, pure white Liliums, interspersed with choice foliage plants, were but a few of the good things to be seen. The gorgeous-coloured Dahlias and beautiful varieties of herbaceous flowers were effectively displayed on stands and in vases. Hanging baskets filled with flowering and foliage plants suspended along the front of the sta





CLOVERS:

THEIR HABITS
AND
REQUIREMENTS.

CLOVERS are, without exception, extremely partial to potash in the soil, and at least some of the beneficial effects observable after the application of lime or basic slag to this crop are undoubtedly due to the liberation of potash already contained in the land. Sands and sandy loams in the middle and north of England are almost invariably poor in potash, and this, apart altogether from the question of moisture, is a frequent cause of failure with the Clover crop, and in many cases explains the disappearance of White Clover from pastures, in the seed mixture for which it may have formed an important constituent. Alsike, too, would certainly find much more favour on light lands if its requirements in this respect received adequate attention. To sands and light loams therefore on which it is intended to sow Clovers, either pure or in mixture, a top dressing of the potash manure or kainit may be used with most profitable results at the rate of 3 cwt. to the statute acre. Where Clover is sown in the Spring with a cereal crop, this dressing of kainit may be applied with excellent effect early the following year. Clovers also make heavy demands upon the phosphates of the soil, and in nearly all cases a dressing of some available phosphatic manure will be found highly beneficial. Basic slag at the rate of 7 cwt. to the acre, or superphosphate of lime at the rate of 3 cwt. to the acre, are the two in most general use.

RED CLOVER, though a plant of short duration, is undoubtedly the most important fodder plant in cultivation. In fact, if the crop could be depended upon, there would scarcely be room for any other species of Clover in alternate husbandry. It usually succeeds in all classes of soil, from stiff well-worked clay to wellconditioned sandy loam, provided they be well drained, fairly rich in vegetable matter, and adequately furnished with the mineral ingredients already suggested. If they contain lime, so much the better. Stagnant water is highly injurious, and a subsoil rich in iron makes the crop at all times a precarious one. Where lime is deficient, an application either the Winter before sowing, or else to some preceding crop, is always beneficial if the soil be otherwise in good condition. Though experts are by no means agreed as to the true cause of Clover sickness, there is no doubt that defective nutrition in mineral foods seriously predisposes the plant to that universal disease.

WHITE CLOVER, as compared with Red, is much less sensitive to climate, is more lasting, and thrives on soils of poorer quality. It has bulk for bulk a higher nutritive value, and does not so readily give rise to flatulency. Though most of its roots are superficial, its long, descending tap-root enables it to withstand drought nearly as well as Red Clover. It should form an indispensable ingredient on all lowlying pasture land, and may, in fact, be used in almost all mixtures for permanent or temporary grass.

ALSIKE, with its bountiful supply of nutritious fodder, does not seem to be at all susceptible to Clover sickness, and is quite indifferent to cold. Growing well on a great variety of soils, it succeeds best on damp moist loams and clays, even when too wet for other Clovers, and is the only species really suitable for irrigation. As all its roots are near the surface, and therefore limited for food supplies to a small thickness of soil, top dressings of potash and phosphate manures, and, when necessary, a previous application of lime, produce at times more striking results than with the other Clovers. By the careful application of farmyard manure and potash, excellent mixed crops, in which Alsike predominated, have been obtained from soils too light in character to carry any other Clover.

CRIMSON CLOVER, is the best forage plant known for sowing on the stubble of a cereal crop where the climate is favourable for its growth. The most congenial soil is a warm or gravelly loam, though in milder districts it does well on stronger land. It should be sown broadcast by the end of August on a clean corn stubble that has been harrowed once or twice but not ploughed. The seed should then be well harrowed in, and the surface rolled with a heavy roller. Its growth is more rapid than that of Winter Tares, and the entire crop may be cleared off by the month of June.

TREFOIL, or YELLOW CLOVER, almost invariably forms an ingredient in mixtures for alternate husbandry, chiefly because of its earliness and the rapidity with which it makes a complete "bottom herbage." It also succeeds in many places where better Clovers fail, and is indeed very accommodating in the matter of soil. In common with true Clovers, it is very fond of lime, and will grow on practically all soils containing this ingredient.





Clibrans' Clover Seeds.

Unadulterated and Thoroughly Machine Cleaned.



With our Clover Seeds we are most particular in the matter of quality, and carefully select all samples from the most reliable sources, and from robust, healthy stocks only; our patrons may therefore rely on all being gennine and unadulterated. While, to suit our different patrons, we have to keep a supply of various qualities, the difference between the highest-priced and the cheapest is so little that we would impress on our customers not to order the lowest-priced samples, which naturally will not produce the same satisfactory results as the higher qualities. No one should order the lowest-priced seeds, seeing that the best can be bought for so little.

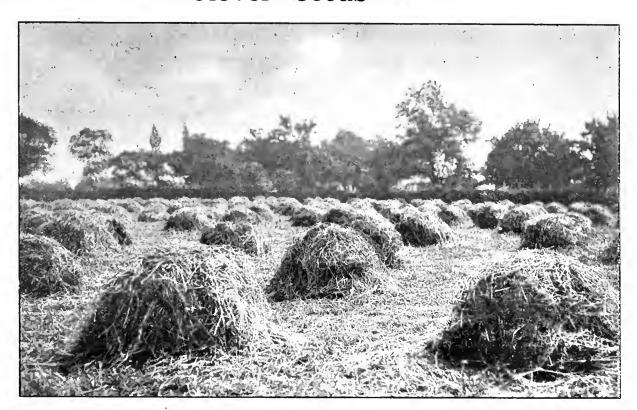
Red, Clibrans' Special Mixture.—It frequently happens that where one variety of Red Clover will not succeed, another will. We have, therefore, selected some of the finest samples saved in the different districts, and bulked them together, and have every confidence in recommending this Special Mixture	Per Ib. s. d. 1 1	Per cwt, 118/-
Red, Broad-leaved (Trifolium prateuse).—This is undoubtedly the most valuable of all Clovers for Hay and Alternate Husbandry, its strong luxuriant toliage being readily eaten by all kinds of stock. FINE QUALITY	10d. to 1 - 1/- to 1 2	93/- to 108/ 108 - to 127/-
Red, Welsh.—The seed of this variety having been harvested on the Welsh hills, is consequently of extremely hardy constitution, and will often stand the severest weather when other sorts tail	1 1 to 1 3	118 - to 135/-
Cowgrass (Trifolium pratense perenne).—Does not flower so early as the Broad-leaved Red, but can be cut quite as soon for green food; it is also more productive, and of remarkably hardy constitution. Most valuable for clay soils and for permanent pastures. FINÉ QUALITY		
Cowgrass, Giant Hybrid or Perennial Red.—A strong growing variety, withstanding dry weather well, it succeeds on all soils, and yields a heavy crop either for hay or cutting green. Specially recommended for use in permanent pastures	1 - to 1 3	108 - to 135/_

PRICES MAY FLUCTUATE THROUGHOUT THE SEASON.

CLIBRANS, Seed Merchants and Nurserymen,



Clover Seeds—continued.



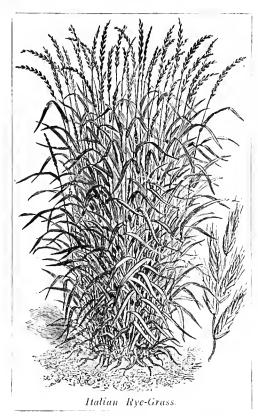
be cut as early for green food. It yields but one mowing crop, but can be grazed afterwards	Per lb.	Per cwt.
with advantage	1/1 to 1 3	118/- to 135/-
Alsike (Trifolium hybridum).—One of the most valuable Clovers either for per-		
manent pasture or alternate husbandry, producing annually a great quantity of herbage of excellent quality. On account of its hardy and tenacions nature it is particularly valuable for Clover-sick land where other varieties will not thrive.		
	10d. to 1/- 1/1 to 1/3	90/- to 108/- 118/- to 135/-
White or Dutch (Trifolium repens).—Practically indispensable for per-	,	100,
manent pastures and for all leys that are to remain down for more than one year, especially those intended for sheep grazing.		
FINE QUALITY	8d. to 10d. 11d. to 1/-	70/- to 90/- 98/- to 108/-
White, Giant Perennial. A strong-growing variety, superior to the Common White, assists in forming a rich close turf when used in permanent pastures, &c	1 /	,
Trefoil or Yellow (Medicago lupulina).—A valuable variety for alternate husbandry producing a bulky yield, it is a rapid grower and valuable for early feed when sown with other Grasses and Clovers. Being a biennial, it is unsuitable for permanent pastures. FINE QUALITY	1/~ 4d.	108/-
BEST QUALITY	6d.	52/-
Crimson Clover (Trifolium incarnatum) —An excellent substitute when spring sown Clovers have failed. If sown in Angust or September, either alone or with Rye		
Grasses upon stubbles, it will be ready to cut in spring (Market Price)		··· —
Mixed Clovers for Alternate Husbandry.— Contains the best varieties for cutting the first year and grazing the next	1 /= to 1 /9	100 / 4 107 /
Mixed Perennial Clovers.—A mixture of the choicest Perennial varieties,	1)- (O 1/2	108/- to 127/-
selected for improving the herbage on permanent pastures that contain little or no Clovers	10d. to 1/-	90/- to 108/-

Home Saved.





Per Bushel.



RYE-GRASSES.

It is very important that Rye-Grass Seeds should be free from weeds and other impurities. Those we offer have been selected from the very finest samples grown, and thoroughly re-cleaned by the latest and most improved machinery.

ITALIAN.

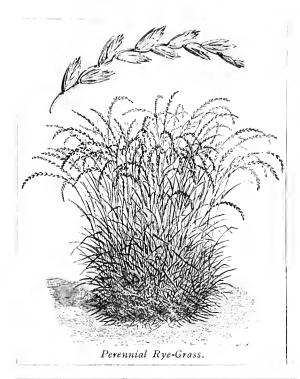
Italian Rye-Grass is every year coming into greater favour. It is more nutritious and productive than Perennial Rye-Grass, and very valuable on account of its fast and earlier growth. It should form a considerable proportion of all mixtures for alternate husbandry, but as it only lasts two years should be very sparingly used in Grass Mixtures for permanent pasture.

FINE QUALITY FINEST QUALITY						5/- to 5/3 5/6 to 6/-
French Imp		ed.				
Genuine heavy see FINEST QUALITY, as		ted, pe	r origi	nal ba	le of	
220 lbs., 58/- and 6	3/-					6/- to 6/6
FINEST QUALITY, ext	ra re-cl	eaned				6/6 to 7/-

PERENNIAL.

In most cases where large crops of herbage are required, a mixture containing a portion of Perennial Rye-Grass is usually considered desirable. It is not only the best of all grasses to ensure a crop, but its excellent feeding properties are generally recognised, especially in the principal butter and milk producing districts of the country.

the country.						
Ayrshire. FINE QUALITY FINEST QUALITY	•••		•••			Per Bushel. 5/6 to 9/- 6/6 to 7/-
Pacey's. FINE QUALITY FINEST QUALITY						5/6 to 6/- 6/6 to 7/-
Clibrans' Thoroughly re-clea other Perenniand quality	ned a al Ry	nd mu e-Grass	ch supe ses bo	erior to th in	the yield	7/6
Devonshir A splendid dwarf cellent for period	variet	y of c	ompact	t habit	, ex-	



grounds, &c.

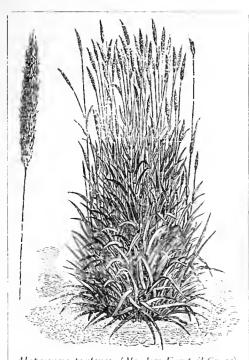
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Natural Grasses.

FOR PERMANENT PASTURE AND ALTERNATE HUSBANDRY.



Alopecurus pratensis (Meadow Fox-tail Grass).

Anthoxanthum odoratum (Sweet-scented Vernal Grass).

The Natural Grasses named in the following list are particularly adapted for the formation of permanent and temporary pastures. They are the most desirable and nutritious varieties, and most of them are included in our various mixtures. The seed we offer has been thoroughly cleaned by the most improved machinery, and for purity and germination cannot be surpassed.

Agrostis Stolonifera

(Fiorin or Bent Grass).

Per lb., 9d. to 10d.

Perennial, 1½ ft. to 2 ft. Flowers in July. A useful grass, of creeping habit, luxuriating in a light moist or wet soil, and growing well on moist moors and clays. On dry soils it is of little value. It gives an excellent return of succulent appetising fodder the first year on a suitable soil. Being a very late grass, and not injured by frost, it is most suitable for providing late pasturage.

Alopecurus Pratensis

(Meadow Fox-tail Grass).

Per lb., 2s. to 2s. 3d.

Perennial, 2 ft. to 3 ft. Flowers May to June. One of the most valuable grasses in cultivation; produces an abundance of sweet, attractive herbage, equally palatable in the green and dry state; is almost as early as Sweet Vernal; yields a splendid aftermath; withstands the severest cold better than any other fodder grass, and thrives well under the shade of trees. Crops most abundantly on rich moist land, whether sandy loams or strong clays; but grows well on all soils save poor dry sands and those containing stagnant water. Should form an ingredient in almost all permanent pastures, but as it does not reach its maximum development till the third season, should be used only for such leys as are to lie down for four years or more. Very scarce.

Anthoxanthum Odoratum

(Sweet-scented Vernal Grass).

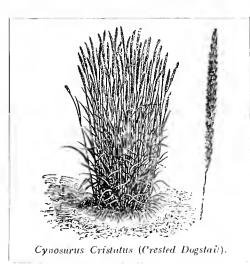
Per lb., 2s. 6d. to 2s. 9d.

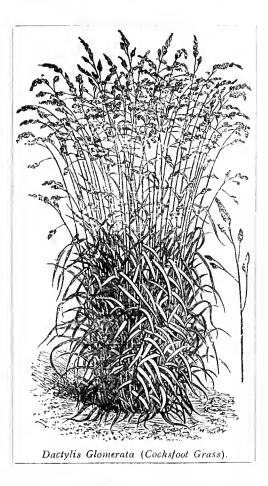
Perennial, I ft. to 1½ ft. Though succeeding best on moist sands and loams, this is a most accommodating grass, comparatively unaffected by cold, excessive moisture, drought, or shade. It is the earliest of all grasses in the spring, gives a continuous supply of green leaves and imparts a delicious aroma to the hay; develops rapidly, giving a good return the first year. The seed of Puel's Vernal Grass, a worthless annual, is very largely substituted for the genuine variety. We guarantee ours to be true.





Natural Grasses—continued.





Avena Flavescens (TRUE).

(Golden Oat Grass).

Per lb., 2s. 3d. to 2s. 9d.

Perennial, Ift. to 2ft. Flowers June to July. A rich nutritious grass producing a good yield of excellent fodder on almost all classes of soil except light dry sands and strong cold clays, under almost all conditions of weather. It is specially partial to soils on the limestone or where lime has been recently used; gives a good return the first year and can always be relied on to give two cuttings annually, the second being usually larger than the first. It is valuable for temporary and still more for permanent pastures, and for suitable soils will be found a most welcome constituent of pasturage mixtures. The wide differences of opinion as to the merits of this grass are chiefly due to the great difficulty in harvesting the seed, resulting in the very extensive substitution of the seeds of useless weeds like the Wavy Hair Grass for the genuine species.

Cynosurus Cristatus

(Crested Dogstail).

Per lb., 1s. 9d. to 2s.

Perennial, I ft. to I½ ft. Flowers June to July. A fine-growing, highly nutritious grass of compact habit, readily forming a perfect sward, suitable for permanent pastures, sheep-walks, lawns, and ornamental grounds; specially adapted for clevated mountain pastures; grows by preference on moist, well-drained soils rich in vegetable matter, but succeeds well anywhere except on sour clays and dry sands. Resists cold, shade, and extreme drought; gives an abundant aftermath.

Dactylis Glomerata

(Cocksfoot or Orchard Grass).

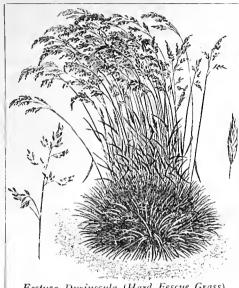
Per lb., 1s. to 1s. 3d.

Perennial, 2 ft. to 3 ft. Flowers June to July. One of the hardiest and best of "top grasses," thriving in every class of soil except poor sands and dry heaths, and growing well under the shade of trees; roots deeply, and resists excessive drought. It is of rapid growth, and produces an enormous bulb of nutritious herbage, which is greatly relished by horses, cattle, and sheep. It forms a large proportion of many of our best natural pastures, and for permanent pasture, alternate husbandry, or for hay has no equal. It yields, probably, the most nutritious aftermath of any European grass. Should be kept closely cropped or will become coarse.

JOSEPH CORNES, Esq., The Fields Farm. Hurleston, Nantwich —"The Clover Seeds which I had from you gave me great satisfaction, also the Turnips and Mangel Seeds produced grand crops"









Festuca Duriuscula (Hard Fescue Grass)



Natural Grasses—continued.

Festuca Duriuscula

(Hard Fescue Grass).

Per lb. 6d. to 8d.

Perennial, 13 ft. to 2 ft. Flowers June to July. A vigorous form of Sheep's Fescue, larger in the leaf and much more productive. It thrives remarkably well on all classes of soil except such as are sour and badly drained, endures shade, and resists extreme drought. For most permanent pastures it is invaluable, forming a fine dense "bottom" readily eaten by all kinds of stock. It is also an excellent grass for parks, lawns, and game preserves.

Festuca Elation

(Tall Fescue Grass).

Per lb., 1s. 1d.

Perennial, 3 ft. to 4 ft. Flowers June to July. A very early and highly productive "top grass," much appreciated by stock both in the green and the dry state; especially valuable for rich moist low-lying medium and strong loams, for strong tenacious clays, and for damp shady

Festuca Ovina

(Sheep's Fescue Grass).

Per lb., 6d. to 8d.

Perennial, I ft. Flowers in June. Thrives on all classes of soil except such as are very wet and sour. Can successfully withstand extremes of temperature and the severest drought, and is therefore indispensable for dry pastures and sand land generally, especially where the soil is poor, shallow, and liable to be "baked" in summer. Is also very useful for elevated mountain pastures. Should be sown mixed with other seeds to obtain a complete sward.

Festuca Ovina Tenuifolia

(Fine-leaved Fescue Grass).

Per lb., 1s. 6d. to 1s. 9d.

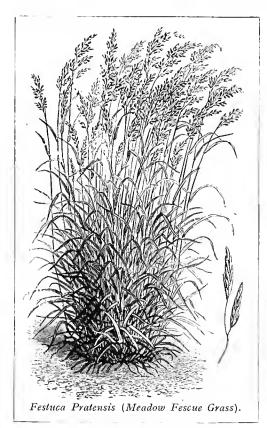
Perennial, I ft. to 11 ft. Flowers in June. Is a low-growing, fine hair-like dark green grass, useful for dry shady places and for lawns. Not of so much agricultural value as the type.

JOHN Сорроск, Esq., Henbury, Macclesfield, writes:— "The Seeds I had from you last year have done very well indeed, I do not remember ever having a more healthy looking lot.'





Natural Grasses—continued.





Festuca Pratensis

(Meadow Fescue Grass).

Per lb., 9d. to 1s.

Perennial, 2 ft. to 3 ft. Flowers June to July. Among the best of all grasses for permanent pastures on soils that are fairly well supplied with vegetable matter. On rich moist soils gives a splendid return of tender succulent nutritious fodder, greatly relished by all classes of farm stock; stands grazing exceptionally well. Is of great value in alternate husbandry, but not for short leys, as it takes three years to reach maturity. One of the most useful of English grasses for milk production.

Lolium Italicum

(Italian Rye Grass).

Biennial, 3 ft. Flowers June to July. This is too well-known to require a lengthy description. It is more suitable for alternate husbandry than permanent pastures on account of its biennial nature, and thrives best on wet soils. For price, see "Rye Grasses," under separate heading, page 5.

Lolium Perenne

(Perennial Rye Grass).

Perennial, 1½. ft. to 2 ft. Flowers June to August. Thrives admirably in any soil or situation, and is held in high esteem for alternate husbandry. For price, see "Rye Grasses," under separate heading, page 5.

Phleum Pratense

(Timothy or Catstail Grass).

Per lb., 5d. to 6d.

Perennial, 1½ to 3 ft. Flowers June to July. Makes a magnificent growth on deeply-ploughed moist loams and clays, and is one of the most serviceable grasses for cold wet clays and drained moorlands. For luxuriant development it requires abundance of water, and is therefore of little value on dry, sandy, or gravelly soils. Responds in an extraordinary manner to the action of nitrogenous manures. As a green food it is palatable and nutritious. If secured before flowering the hay is wholesome and rich; if cut too late it is hard.

Poa Nemoralis

(Wood Meadow Grass).

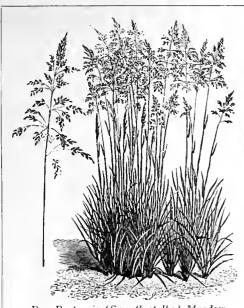
Per lb., 2s. 6d. to 2s. 9d.

Perennial, 1½ to 2 ft. Flowers June to July. This grass is dwarf, productive, and a continuous grower, comes very early, and resists extreme drought. It grows remarkably well under trees; hares and rabbits are especially fond of it; while game birds eat the ripening seeds with great relish. It is also of much value for lawns and ornamental grounds generally.

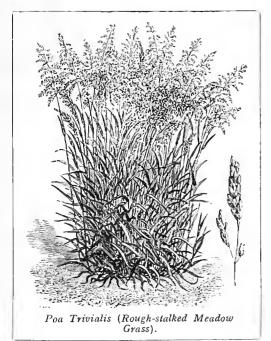




Natural Grasses—continued.



Poa Pratensis (Smooth-stalked Meadow Grass).



Poa Pratensis.

(Smooth-stalked Meadow Grass).

Per lb. 1s. 3d. to 1s. 6d.

Perennial, 1½ ft. to 2 ft. Flowers June to July. Grows well on all classes of soil that contain enough of vegetable matter, provided they be not too stiff or sour; is of greatest value, however, on light, dry soils. Is very early, resists extremes of drought and cold, and by the second season forms a dense complete bottom sward. Specially useful for spring pastures, but its dense growth makes it unsuitable for clover mixtures. Should be cut when in flower.

Poa Trivialis.

(Rough-stalked Meadow Grass).

Per lb. 1s. 4d. to 1s. 6d.

Perennial, 2 ft. to 3 ft. Flowers June to July. A most nutritious and palatable moisture-loving "bottom grass," forming a close dense sward on all suitable soils. Incapable of withstanding drought, it luxuriates on moist bottomed lands, does well under the shade of trees, and responds vigorously to generous treatment. Useful for confined grass plots in the vicinity of large towns.

Yarrow or Milfoil.

(Achillea millefolium).

Per lb. 5s.

Perennial, 1½ ft. Flowers June to September. A little of this should be added to all pasturage mixtures for medium and especially for dry soils. Capable of resisting intense drought, it can flourish on hot dry gravelly soils, and there yield excellent pasturage, closely cropped as a rule by all classes of stock.

The following tall-growing grasses are recommended for sowing in plantations, as game cover, or where a coarse bulky herbage is desired.

ARRHENATHERUM AVENACEUM.—(Tall Oat-like Grass).

BROMUS SCHRŒDERI.—(Schræder's Brome Grass).

FESTUCA GIGANTEA.—(Giant Wood Fescue).

FESTUCA SYLVATICA.—(Wood Fescue Grass).

MILIUM EFFUSUM.—(Wood Millet Grass).

Prices on Application.

Samuel Savage, Esq., Bramhall, writes:—" Having sown your Seeds for some years now, I wish to say that they have given me every satisfaction, and I can recommend them with every confidence."

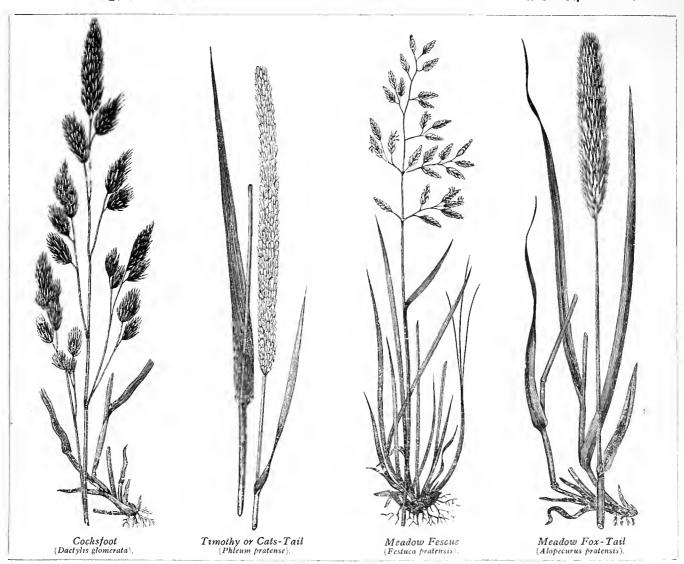




Special Clovers & Grasses Mixtures of

For all Soils and Situations.

In ordering, please state nature of land and situation the seeds are required for



For many years our Special Mixtures have given entire satisfaction, and our customers speak in the highest terms of them. They are prepared with the greatest care, and are composed of suitable proportions of the varieties best adapted for the different soils and situations.

Their composition is so arranged that they form a complete sward, and give the greatest possible yield of the most nutritious and serviceable food at the least expense, for the time required; also, in the case of Temporary Pastures, they leave the soil in the best possible condition for subsequent cropping.



CLIBRANS' SPECIAL MIXTURES OF CLOVERS & GRASSES

FOR ROTATION CROPPING.

In ordering please state nature of land and situation the seeds are required for.

The following mixtures consist of the most suitable kinds of Grasses and Clovers adapted to the various rotations of crops for which they are prepared, and in such proportions as will produce the heaviest crop during the time for which they are specified. As many of our patrons prefer to have a little Ribgrass in their mixtures we shall be glad to include this if desired.



Clovers and Grasses for One Year's Ley.

NO. 1 MIXTURE, composed of Re-cleaned Italian Ryegrass, Broad Red Clover, Alsike Clover, and Trefoil, BEST QUALITY, PER STATUTE ACRE	12	6
NO. 2 MIXTURE, similar to above CHEAPER QUALITY, PER STATUTE ACRE	11	6
Cowgrass, Alsike Clover, and Trefoil BEST QUALITY, PER STATUTE ACRE NO. 4 MIXTURE, similar to preceding CHEAPER QUALITY, PER STATUTE ACRE	10	0
NO. 4 MIXIORE, Similar to preceding		

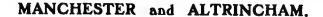
Clovers and Grasses for Two Years' Ley.

NO. 5 MIXTURE, composed of Re-cleaned Italian Ryegrass, Perennial Ryegrass, Cocksfoot, Timothy, M.	eadow-Fescue, Broad	
Pod Clavor Compress Algika Clavor White Claver and Trefoil BEST QUALITY FEI	K SIAIUIE ACKE	11 0
	R STATUTE ACRE	14 6
NO. 6 MIXTURE, similar to above CHEAPER QUALITY, PEI		

Clovers and Grasses for Three and Four Years' Ley.

NO. 7 MIXTURE, composed of Re-cleaned Italian Ryegrass, Perennial Ryegrass, Cocksfoot, Timothy, Meadow-Fescue, Tall	
E-come Drood Dad Clover Coversee Alsike Clover White Clover and Field BEST QUALITY, FER STATULE ACRE	40 U
NO. 8 MIXTURE, similar to preceding	16 (
NO. 8 MIXTURE, similar to preceding CHEAPER QUALITY, PER STATUTE ACRE	

J. M. Podmore, Esq., Deeside House, Sealand, Chester, says:—"The Farm Seeds you supplied me with last year have given every satisfaction. The Grasses and Clovers are the best I ever had."







Clibrans' Special Mixtures of Permanent Grasses and Clovers.

The continued success of our well-known Permanent Pasture Mixtures can be attributed to the careful study exercised in selecting the various kinds of Grasses and Clovers, in their proper proportions, adapted for the various soils and situations for which they are intended.

A really first class and profitable Permanent Pasture can only be assured when this system is adopted. The rapid deterioration of a great many pastures is generally to be traced to either the use of cheap seeds or to the sowing of varieties of Grasses and Clovers not at all suited to the geological formation of the land.

To insure the most sultable mixtures being sent, customers will please say whether required for Light, Medium or Heavy Soils.



The following Grasses and Clovers are used in proper proportions in our mixtures for Permanent Pastures: -

Cocksfoot (Dactylis Glomerata).

Meadow Foxtall (Alopecurus Pratensis):
Meadow Foscue (Festuca Pratensis):
Tall Fescue (Festuca Elatior).
Hard Fescue (Festuca Duriuscula).
Rough-stalked Meadow Grass (Poa Trivialis).
Smooth-stalked Meadow Grass (Poa Pratensis).
Wood Meadow Grass (Poa Nemoralis).
Crosted Dogstall (Cynosurus Cristatus).

Timothy: (Phleum Pratense).

Italian Ryegrass (Lolium Italicum).
Perennial Ryegrass (Lolium Perenne).

Sweet Vernal (Anthoxanthum Odoratum).

Cowgrass (Trifolium Pratense Perenne).

White Clover (Trifolium Repens).

Alsike Clover (Trifolium Hybridum).

Yarrow (Achillea Millefolium).

No. 9, CLIBRANS' BEST MIXTURE, composed of a suitable selection of above Clovers and Grasses,

No. 10, CLIBRANS' CHEAPER MIXTURE

No. 11, CLIBRANS' BEST MIXTURE, WITHOUT RYEGRASS, containing a liberal allowance of above Grasses and Clovers in larger proportions, but entirely excluding Perennial Ryegrass

No. 12, CLIBRANS' CHEAPER MIXTURE, WITHOUT RYEGRASS, similar to preceding

PER STATUTE ACRE
26 - to 28 26 - to 34 - to 36 - to 32 26 - to 28 27 - to 34 - to 34 - to 36 - to 32 28 - To 34 - To 36 - To 35 - To 36 - To 35 - To 35





CLIBRAN'S

MIXTURES OF GRASSES and CLOVERS

For Renovating or Improving Old Pastures or Meadows.

Many old pastures in which the herbage is thin or out of condition can be considerably improved both in quality and quantity by the sowing of from 12 to 20 pounds per acre of our Special Mixture, according to the state in which the turf is in. The ground should be well harrowed both before and after sowing and then thoroughly rolled

11d. per lb., 98/- per cwt.

For Upland Sheep Walks.

A Mixture consisting of varieties which succeed well in high and exposed situations and are natural to poor soils

20/- to 22/- per acre.

For Irrigation or Water-Meadows.

30/- to 32/- per acre.

For Game Coverts.

Composed of the stronger-growing Grasses specially selected for affording the best shelter and food for game

1/- per lb., 110/- per cwt.

For Orchards and Grounds Shaded by Trees.

... 11d. per lb., 98/- per cwt.

Clibran's Lawn Grass Seeds.

For Lawns, Bowling Greens, Tennis Grounds, etc.

Our Mixtures of Lawn Grass Seeds are prepared with the greatest care and are composed of suitable proportions of fine-leaved dwarf-growing evergreen kinds; it will be found of particular value to those who love a smooth, close and velvety turf.

EXTRA FINE MIXTURE 1/3 per lb., 135/- per cwt ORDINARY MIXTURE 1/- per lb., 105/- per cwt.

Mr. F. Fuller, of Grappenhall, writes:—"You have the finest Lawn Grass Seeds in this country."

HUGH GRESTY, Esq., Mottram St. Andrew, writes:—"The Seeds I purchased from you last year have done exceedingly well; the plants are strong and healthy, and have every appearance of turning out a good crop."

WM. Allen, Esq., Halliday Hill Farm, Offerton, writes:—"I have great pleasure in testifying to the quality of your Clover Seeds. I have an excellent root on the 6 acres I had last year."



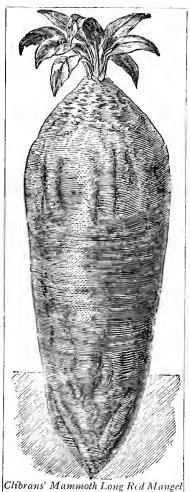


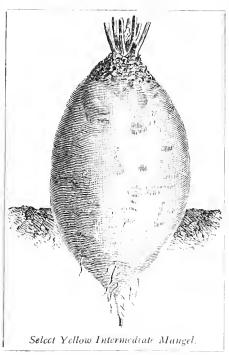
CLIBRANS' ROOT SEEDS.

Our Root Seeds have been carefully selected from picked transplanted bulbs, and the various kinds offered may be relied upon as being the finest types procurable in shape, quality, and weight. We always test the various stocks offered from time to time by other Seed growers; this we claim to be a great advantage which should not be overlooked by purchasers. It incurs great expense, but brings to light many weedy stocks which are at once discarded by our Seed Trial Manager.

MANGEL WURZEL.

Seed should be sown from the second week in April to the beginning of May. The best crops are got from land that has been heavily manured the previous autumn. Artificial manure may be applied just before sowing, with the addition of 3 to 5 cwt. of common salt to the statute acre. The seed should be drilled in rows 2 to $2\frac{1}{2}$ feet apart, according to the sorts grown, and covered with soil to the depth of half an inch. The Long varieties require a deep free soil; the Globes succeed in shallower soils. The Seeds we offer have all been grown from carefully selected transplanted roots.





THOMAS SHEPHERD, Esq., Burton Farm, Rossett, Wrexham, says:—The Grasses and Clovers you supplied me with last year are doing exceedingly well. I am highly pleased with them. The root seeds were also a splendid crop, and gave me every satisfaction."



Amos Nevitt, Esq., Picton, Chester, writes:—"It affords me much pleasure to bear testimony to the excellent qualities of your Farm Seeds—The Grasses and Clovers, &c., you supplied me with last year promise exceedingly well."





MANGEL—continued.



CLIBRANS' Select Monarch Yellow Globe.

See Illustration on next page.

This grand variety, both for size and handsome shape, has proved to be one of the finest Globe Mangels yet introduced, whilst the quality cannot be excelled. It is quite free from coarseness, and grows to an immense size, with a clean tap root and very small top, so that it is easily lifted. The stock we offer has been carefully re-selected and we have every confidence in recommending it as a very superior variety.

Per lb., 8d.

THE MODEL FARM, KNARESBORO'.

Practical proof of the superior quality of your Monarch Yellow Globe Mangel is fully borne out by the enormous crops which I had last year. 136 Roots weighed 1 ton 6 cwt. 4 lbs., and lifted at the rate of 66 tons per acre; the crops were very regular, and the bulbs were most uniform in shape, solid, of fine even growth, and were the admiration of all who saw them."

HY. A. MANN,

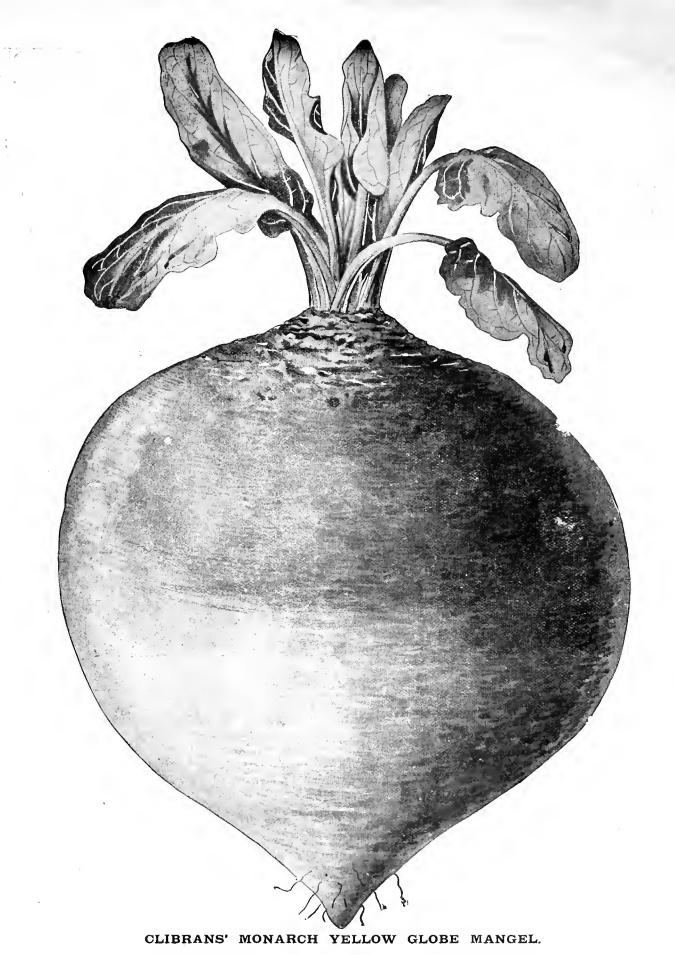
Per lb	ーs.	d.
CLIBRANS' MAMMOTH LONG RED. Strongly recommended as a weight producer on deep rich soils, and in		
situations where long varieties succeed better than globes, it grows to an immense size, and is much superior		
to the ordinary "Long Red." The flesh is very solid and of excellent quality	0	8
LONG RED (ordinary variety)	0	6
SELECTED ORANGE GLOBE. An extra fine variety, of beautiful form and excellent quality; produces a		
heavy crop	0	8
YELLOW GLOBE. Fine select stock. Handsomely shaped root of immense size. It is a splendid keeper,		
and generally does well on all soils	0	8
PRIZE-WINNER YELLOW GLOBE. A superior and very heavy cropping variety, producing large uniform		
bulbs with single tap root and small top. Splendid feeding quality	0	8
GOLDEN TANKARD. A splendid rich deep yellow variety, possessing very high feeding qualities. It produces		
a heavy crop, and can be grown closer in the rows than most varieties	0	8
SELECT YELLOW INTERMEDIATE. On account of its oval shape this may be grown closer in the rows,		
hence producing a heavier crop than any other variety; of good size, fine quality, hardy, and valuable for		
feeding purposes	0	8

RAKE FARM, BURTON, near NESTON.

Gents,—I have great pleasure to inform you that your Clover and Root Seeds have given me every satisfaction. The Clover Root is exceptionally good, whilst the Mangels grew very large and are of grand quality.

Yours faithfully, John Johnson.

ARTHUR PRICE, Esq., Stanney, Chester.—"I have much pleasure in stating that the Farm Seeds I bought from you last spring have done exceedingly well, and gave me every satisfaction."

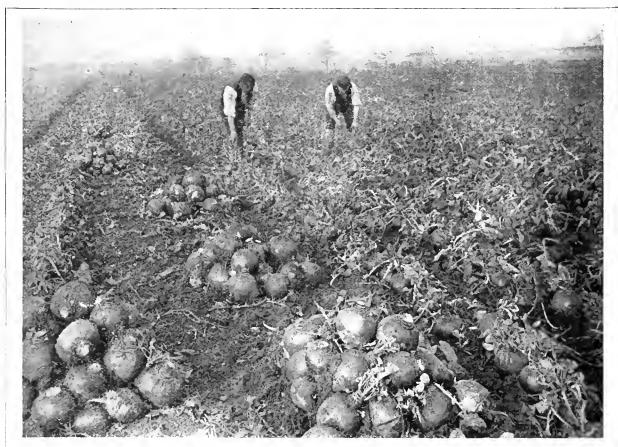


CLIBRANS, Seed Merchants and Nurserymen,



TURNIPS.

Every attention is paid to the growth of our Turnip Seeds, all of which are the produce of picked transplanted roots. We spare neither trouble nor expense in selecting bulbs showing the highest standard of excellence, and our stocks may, therefore, be relied upon to produce a heavy weight per acre of well-formed roots. We would strongly advise our Customers to sow CLIBRANS' SELECT PURPLE-TOP and CLIBRANS' GREEN-TOP, as being the best Swedes in cultivation. The former should be used first, as the latter, being the hardiest of all Swedes, will keep better and later than any other variety.



Clibrans' Select Purple-Top Swede

SWEDES (Purple-Top Varieties).

Clibrans' Select Purple-Top.

We confidently recommend this variety as being the BEST PURPLE-TOP SWEDE in cultivation. It is a very heavy cropper, and by reason of its highly nutritious qualities, is unequalled tor feeding purposes.

An excellent keeper, of good shape and colour, it should be grown by all who desire the best results. Per lb. 10d.

Our Illustrations.

The above illustration, together with the one on opposite page, is from a photograph of a fine field of Clibrans' Select Purple-top Swede, grown by Mr. A. L. Adkinson, of Bramhall.

The crop was an enormous one, and was easily first in a keen competition for the CHALLENGE CUP, offered by the Potash Syndicate, through the Adlington and District Agricultural Society.





TURNIPS—continued.



Clibrans' Select Purple-Top Swede.

SWEDES

(Purple-Top Varieties).

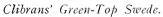
			d.
BEST OF ALL. A very hardy and highly nutritious variety, a good cropper, and an excellent keeper		0	10
CHAMPION. A well-known variety; grows to an immense size, and does well in any soil		0	8
DRUMMOND'S IMPROVED. A handsome Swede of fine quality. Very hardy, good cropper, and keeps we	11	0	8
ELEPHANT. Very targe tankard-shaped variety, arriving quickly at maturity; should be used early		0	9
IMPERIAL. A large growing variety of good shape and quality, keeps well		0	10
MAGNUM BONUM. A heavy cropping, handsome variety, very hardy, and a good keeper		0	9
MONARCH. Early and a tremendous cropper, one of the best varieties for early feeding	• • •	0	9
RINGWAY. An excellent and popular variety with the Cheshire farmers, very hardy, large, and handsom	e in		
shape; a grand keeper and splendid quality		0	10
SKIRVING'S. A very large growing variety, producing a heavy crop, which keeps well		0	8

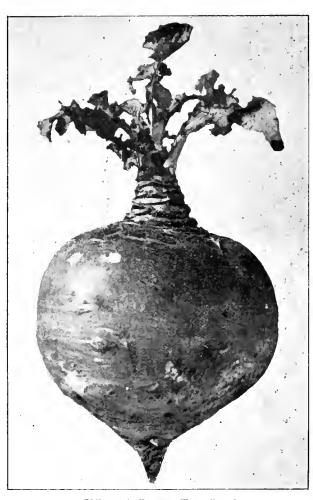




Turnips—continued.







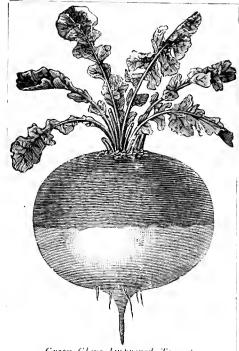
Clibrans' Bronze-Top Swede.

Swedes (Bronze and Green-Top Varieties).

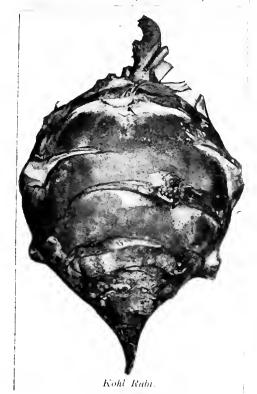
	Per	lb.—s	s. d.
CLIBRANS' GREEN-TOP. A superior variety. The roots are large, extremely hardy and nutritious		(9
CLIBRANS' BRONZE-TOP. A very handsome heavy cropping variety, of fine shape and quality	• • •	() 9
GOLIATH GREEN-TOP. A very hardy Green-Top Swede, and a general favourite in Yorkshire		() 10
BLODWIN. A most valuable Swede, very hardy, and of splendid feeding qualities; a popular variety	y with 1	the	
Welsh farmers		() 10
GOLDEN MELON. A bronze colour, very hardy, heavy cropper, and handsome in shape		() 10
HALEWOOD. (A very select stock). A splendid variety, hardy, and of rich quality, oblong shape		(0 10
HARTLEY'S SHORT-TOP. An excellent hardy variety, splendid cropper and a fine keeper		(0 8
KANGAROO. A tankard-shaped variety, exceptionally hardy, and produces a heavy weight		(09
LORD DERBY GREEN-TOP. A hardy variety, keeps well		(09
MERCERS' GREEN-TOP. An extremely hardy sort, of fine quality, and a first-rate keeper		(
MODEL. A valuable variety of globular shape, with light bronzy purple top, a quick grower and heav	y crop	per (0 10
SELECT GREEN-TOP. A popular and valuable hardy variety, very superior both in size and quality	y		0 8
X.L. ALL. An exceedingly handsome bronze-top variety, of fine shape and quality	•••	(0 10







Green Glove Improved Turnip.



Turnips—continued.

Yellow-Fleshed Varieties.

Per lb.—s.	d.
PURPLE-TOP YELLOW SCOTCH. A good keeper highly	
nutritious, and nearly equal to a Swede for feeding purposes 0	9
IMPROVED GREEN-TOP YELLOW SCOTCH. A very hardy	ľ
and valuable turnip; produces a heavy crop, and keeps well 0	9
YELLOW TANKARD. An early, long-shaped variety, grows a	
heavy crop, largely used for feeding sheep off the ground	10
DALE'S HYBRID. One of the best types of Scotch Green-Top	
Yellow Turnips; grows to a large size, and keeps well 0	9
FOSTERTON HYBRID. From original stock. One of the most	
valuable Green-Top Yellow Turnips in cultivation 0	9
INVINCIBLE GREEN TOP. Suitable for early or late sowing,	
of round shape, flesh firm and juicy 0	10
White-Fleshed Varieties	

Per lb.—	-S.	d
GREEN GLOBE, IMPROVED. A superior variety, large, and of		
perfect shape. The hardiest of all the white-fleshed turnips	0	7
GREEN BARREL. A first-rate turnip, oval shape, very hardy	0	7
GREY STONE. A quick-growing, heavy-cropping variety	0	7
PURPLE-TOP MAMMOTH, IMPROVED. An excellent type of		
this well-known variety, largely grown for early feed. Finely		
shaped, very solid and juicy, and thrives well on poor soil	0	8
POMERANIAN WHITE GLOBE. A large and handsome variety.	-	
one of the best for early consumption	0	7
1	•	•

Turning for Late Sowing

armps for Bate Sowing.		
Per lb.—	-5.	C
ALTRINCHAM YELLOW. An excellent variety, good for early use	1	
EARLY MARKET GREEN-TOP WHITE (Dean's). Extra selected		
stock, specially recommended for market purposes EARLY WHITE STONE OR SIX WEEKS. A quick growing variety,	1	
and very popular A quick growing variety,	0	1
and very popular	•	-
growth, and a good keeper	1	-

Kohl Rabi.

(Turnip-rooted Cabbage.)

This is in reality a Kale, with the stems distended, so as to resemble the "bulb" of a turnip. The "bulb" itself is of a higher feeding value than the turnip and the leaves are as nutritious as ordinary kale. It is very hardy, does well in any soil, and stands drought better than Swedes, for which it is an excellent substitute.

Per lb.—s. d. **LARGE GREEN.** The best variety in cultivation ...

Joseph Wood, Esq., Syddal House Farm, Bramhall, writes:—"I am pleased to say the seeds I have had from you for a number of years have always been very satisfactory.''







CARROT.

Carrots are greatly relished by all kinds of stock, and are a most profitable crop, especially when grown on sandy, light or medium soils. The seed offered is saved from carefully selected stocks and has been all thoroughly cleaned.



	Per lb		d.
CLIBRANS' SELECTED LONG RED ALTRINCHAM. A splendid variety and a great favourite.			
large, and is of excellent quality		2	6
LARGE WHITE BELGIAN. One of the best for field culture, and a very heavy cropper		1	9
LONG RED SURREY. Very large, fine quality, adapted for deep, light soils		2	0
JAMES' SCARLET INTERMEDIATE. An excellent variety, suitable for soils of medium depth.	It is of fine		
quality, and produces a heavy crop		2	6
ST. VALERY. Heavy cropper, and splendid quality. Highly recommended		2	6



Field Cabbage.

Though Cabbages succeed on most soils provided they receive sufficient moisture and nourishment, it is more especially on clay land that they prove such an inestimable boon to the farmer. Certainly no crop is capable of giving so much nutritious green food per acre as this. For sheep, for dairy cows and for fattening bullocks Cabbages are alike invaluable.

Robinson's Champion Druv head Cabbage. Per lb		d.
ENFIELD MARKET. One of the best early sorts in cultivation	2	6
DRUMHEAD, Robinson's Champion. A very fine cattle Cabbage, grows to a great size, and is very solid	0	0
*** winvaluable for winter consumption	4	
DRUMHEAD SAVOY. Very hardy and useful for late feeding	3	U
THOUSAND, HEADED KALE. An oven-headed cabbage of most exceptional constitution, thriving not only or		
strong land, but also on poor soil. It produces an enormous crop. Invaluable for stock feeding. Very		
hardy	1	0
nardy		

Garden Seeds.

kinds for Farmers' Gardens.

Collections including the most useful

VEGETABLE SEEDS......from 2/6 to 21/-

FLOWER SEEDS......from 2/6 to 21/-

Illustrated Garden Seed Catalogue free on application.





Miscellaneous Forage Plants.

- **BIRDSFOOT TREFOIL,** per lb., **2**/**6**. Of great value for dry upland places and light sandy soils; its deep penetrating roots enable it to withstand extreme drought.
- **BROOM** (YELLOW), per lb., 1'- Chiefly sown for game coverts, and to ornament waste land, embankments, &c.
- **BUCKWHEAT** (Market Price). Commonly sown for pheasant feeding.
- **BURNET,** per lb., 1/- An exceedingly useful forage plant, thriving well on poor soils, and furnishing an agreeable change of food for sheep and cows.
- **CHICORY,** per lb., 1/-. A hardy and very nutritious forage plant, doing well on land where grasses and clovers do not give satisfaction. A small quantity is of value in pastures on account of the large amount of herbage it gives.
- FURZE, GORSE OR WHIN, per lb., 4/- Grown for game cover, and sometimes as a forage plant for cattle and horse food, but when used for the latter purpose the shoots should be well bruised in order to destroy the prickly spines.
- **KIDNEY VETCH** (**SAND CLOVER**), per lb., 1/- Suitable for poor soils; recommended for sheep.
- **LINSEED OR FLAX** (Market Price). Finest seed for sowing purposes.
- **LUCERNE**, per lb., 1/-. Particularly adapted for permanent pasture, especially on light dry soil.

- MUSTARD, per lb., 4d, to 5d. Largely grown in some districts for slieep feed, also for ploughing in as manure.
- **PARSLEY, Plain-leaved or Field,** per lb., **6d.** Said to be a preventive of liver rot in sheep, and for that purpose should be used in mixture in small quantities when the soil is of a light or medium description.
- **PARSNIP, Large Guernsey.** per lb., 1/-. A superior variety for cattle.
- PRICKLY COMFREY, per 100 sets, 5/-; per 1,000, 30/-
- POLYGONUM SACHALINENSE.—Small plants, per 100, 20/-; per doz., 3/-; each, 4d. Sets, 10/- per 100. Recent experiments indicate that this plant may be of some use as fodder. On account of its rapid growth three or four cuttings can be made in one year. The best plantations are made in August and September, or in Spring, spacing the plants three feet apart.
- **RAPE, Broad Leaf or Dwarf Essex,** per lb., **4d.** to **5d.** A fine variety for field sowing, producing an immense weight of foliage.
- RIBGRASS OR PLANTAIN, per lb., 3d., to 4d.
- **SAINFOIN, GIANT** (Milled). A valuable forage plant on dry and chalky soils. (Market Price).
- **SUCKLING CLOVER,** per lb., **8d.** On sandy and stoney soils, where other clevers will not thrive, this variety is of great value.
- **SUNFLOWER,** per lb., 1/-. For feeding game and poultry.
- TARES OR VETCHES (Market Price).

Le Butt's New Self-acting Seed Drill.

This most useful Implement should be in the hands of every Farmer and Gardener. The rim or travelling wheel is made conical, ensuring the steady travelling so necessary in its use, and also presses the soil ready for the Coulter. The seed is placed in the hopper, and by simply pushing the drill along the ground the seed is released and falls through a tube situated behind the Coulter, and drops into the soil. A light harrow fixed behind the drill performs the work of covering the seed and completes the work. By simply turning a thumb-screw it can be adjusted for sowing seeds of any size or shape.



Price, 126 each.

A. C. Arnold, Esq., Newton Hall, Prestbury, writes:—"1 tried your Seeds against three other firms, and am pleased to say that yours have turned out the best of the lot."

THOMAS HAYES, Esq., Ollerton Hall Farm. Ollerton, Cheshire, writes:—I have much pleasure in stating that the mixtures of Grasses and Clovers you supplied me with last year, have done exceedingly well. They were sown alongside seeds from other leading firms, but I must say that yours have turned out the best. The Mangolds and Swedes were also an excellent crop."





Telegrams-Clibrans, Hale, Altrincham.

Telephone-16, Altrincham.

NURSERY DEPARTMENT.

Over **350** acres of land at Altrincham, Hale, Bowdon, and Bramhall are devoted to the raising and cultivating of every class of Hardy Tree and Shrub, &c., &c. Every Department is under the control of a specialist. Our Glasshouses, covering several acres of land, contain one of the largest, most comprehensive, and representative stocks of Indoor Plants in the kingdom.

Hedge Plants.

THORNS, BRIARS, PRIVET, and all classes of hedge plants, are grown by the million. Being cultivated on exposed elevated land, and regularly transplanted, they possess a vigour and hardihood that is lacking in plants grown in warmer and more sheltered places, and in addition possess an abundance of roots.

Fruit Trees.

The most profitable varieties of **APPLES**, **PEARS**, and all **HARDY FRUITS** are grown in quantity. True to name, splendidly rooted, and free from all pests and disease, they are in an ideal condition for removal, and cannot fail to do well.

Forest and Ornamental Trees.

We hold immense stocks of Trees for Timber production, Shelter purposes, and Ornamental Planting. Clean grown, healthy, and splendidly rooted. We invite inspection of our stocks.

ORNAMENTAL SHRUBS.
LAURELS AND HOLLIES.
HERBACEOUS AND BOG PLANTS.
CARNATIONS AND DAHLIAS.

RHODODENDRONS AND ROSES. HARDY CLIMBING PLANTS. ALPINE AND ROCKERY PLANTS. CHRYSANTHEMUMS AND FERNS.

Landscape Gardening.

Large and important contracts for the formation of new, and remodelling of existing Estates and Gardens have been carried out by us for many years, in all parts of the country. A special Department of our business is entirely devoted to work of this kind. Surveys made. Plans and Estimates given for every class and style of Landscape work. Consultations by appointment.

EVERYTHING FOR THE GARDEN, FARM, AND ESTATE.

THE FOLLOWING CATALOGUES MAY BE HAD FREE ON APPLICATION:-

Vegetable and Flower Seeds	J	January	Bulbs and Forcing Plants	August
Agricultural Seeds	F	ebruary	Carnations, Pansies, Violas	August
D ahlias		March	Forest Trees, Hedge and Covert Plants	October
Stove and Greenhouse Plants		March	Roses	October
Herbaceous and Alpine Plants		March	Fruits	October
Bedding Plants	•••	April	Ornamental Trees, Shrubs, and Climbers	October
Garden Tools, Sundries, and Requisites .	•••	April	Chrysanthemums—General List	November
Strawberries		August	Chrysanthemums—Novelty List	J anuary

TABLES AND OTHER USEFUL INFORMATION.

Seeds required to Sow a Statute Acre.

Per Acre.
Barley 3 bush.
Beans3 to 4 bush.
Buckwheat2 to 3 bush.
Broom20 lb.
Cabbage 2 lb.
Carrot 7 to 8 lb.
Clover, alone16 lb.
Clover, with Rye-Grass,
10 to 14 lb.
Clovers and Grasses mixed
for permanent pasture,
36 to 40 lb.
Crimson Clover 20 to 24 lb.
Furze or Gorse20 to 24 lb.
Kohl Rabi (to transplant),
2 to 3 lb.
Kohl Rabi (in drills)4 lb.
Lawn Grass Mixture,
60 to 80 lb.
Linseed, for Flax $2\frac{1}{2}$ bush.
Linseed, for Seed1½ bush.

Per Acre.
Lucerne 16 to 20 lb.
Mangel-Wurzel6 to 8 lb.
Mustard20 lb.
Oats4 bush.
Parsley, with other Seeds,
2 lb.
Parsnip 6 to 8 lb.
Peas4 bush.
Potatoes12 to 15 cwt.
Rape12 to 16 lb.
Rye4 bush.
Rye Grass, alone 3 bush.
Rye Grass, with Clover,
ı to 1½ bush.
Sainfoin4 bush.
Swede4 lb.
Turnip3 lb.
Vetches3 to 4 bush.
Wheat, broadcast3 bush.
Wheat, drilled 1 to $1\frac{1}{2}$ bush.

Prices per Lb., per Qr., per Cwt., per Ton.

Per	Per	Per	Per	Per	Per	Per	Per
lb.	28 lb.	112 lb.	Tou.	lb.	28 lb.	112 lb.	Ton.
d.	£ s. d. 0 0 7 0 1 2 0 2 9 0 2 4 0 4 8 0 7 0 0 9 4 0 11 8	£ s. d. 0 2 4 0 4 8 0 7 0 0 9 4 0 18 8 1 8 0 1 17 4 2 6 8	£ s. d. 2 6 8 4 13 4 7 0 0 9 6 8 18 13 4 28 0 0 37 6 8 46 13 4	d. 6 7 8 9 10 11	£ s. d. o 14 o o 16 4 o 18 8 i i o i 3 4 i 5 4 i 8 o	£ s. d. 2 16 0 3 5 4 3 14 8 4 4 0 4 13 4 5 2 8 5 12 0	£ s. d. 56 0 0 65 6 8 74 13 4 84 0 0 93 6 8 102 13 4 112 0 0

Useful Table of Land Measure.

The Statute acre is 5½ yards square to the rod (30½ square yards), and contains 4,840 yards.

The Lancashire acre is 7 yards square to the rod (49 square yards), and contains 7,840 yards.

The Cheshire acre is 8 yards square to the rod (64 square yards), and contains 10,240 yards.

Roughly estimated, 1½ Statute acres are nearly equal to a Lancashire, and 2 Statute acres nearly equal to a Cheshire acre.

Dry Measure.

This is based on the Imperial gallon, and is used for measuring grain, fruit, and other dry goods.

00,	J 0
4 gills = 1 pint	2 bushels = I strike
2 pints = 1 quart	4 bushels = 1 coomb
2 quarts = 1 pottle	8 bushels = 1 quarter
2 pottles = 1 gallon	5 quarters = 1 weigh
2 gallons = I peck	2 weighs (10 quarters)
4 pecks = 1 bushel	= I last

A sack of flour contains 5 bushels, and weighs 280 lb. A barrel of American flour weighs 196 lbs. Eight bushels of wheat grind to 6 bushels of bolted flour; 1 of coarse flour, 2 of pollard, and 4 of bran. A sack of 3 bushels of potatoes in the London markets, which is considered the standard, should weigh 168 lb.

Land Measure.

Land, or any surface of considerable extent, having length and breadth, is measured by **Gunter's chain**, which consists of 100 links, measuring 66 ft. = 22 yards = 4 poles in length.

```
62,726 sq. iinches= 1 sq. link

2,295 sq. links = 1 sq. foot

20,661 sq. links = 1 sq. yard

625 sq. links = 1 sq. pole

or perch

40 sq. poles (perches)

= 1 sq. rood

4 sq. roods (4,840 yds)

= 1 sq. acre

10 sq. chains ... = 1 sq. acre
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